

REMARKS

Applicants have amended paragraph [0055] of the specification to correct a typographical error. A person of ordinary skill in the art would recognize that pentavalent carbon atoms typically do not exist in stable compounds. Therefore, a person of ordinary skill in the art would recognize that two of the chemical structures previously shown in paragraph [0055] contain typographical errors, specifically by including an extra hydrogen atom on one of the carbon atoms in the oxygen-containing epoxide ring. The correct structure of an epoxide ring, not including an extra hydrogen atom or a pentavalent carbon, is shown in paragraph [0062]. Applicants have also amended claims 40 and 41 to correct the same typographical error in the definition of R_8 .

Applicants have amended claims 44 and 45 to recite structural rather than process limitations, for the sake of consistency of form with independent claim 26 as currently amended.

Applicants have added new claims 50-55. Support for new claims 50-55 is found in paragraph [0138] and elsewhere throughout the specification. As a result, claims 26-29 and 31-55 are pending in the present application.

No new matter is added in these amendments or new claims.

Claims 26-29 and 31-49 are rejected under 35 U.S.C. § 102(b) as allegedly anticipated by Zhang et al., *Analytica Chimica Acta* 388, 71-78 (1999) (hereinafter "Zhang").

Applicants respectfully request reconsideration of the present application in view of the foregoing amendments and following remarks.

Telephone Interview

Applicants thank the Examiner for the telephone interview conducted on July 12, 2010, with Applicants' representative. During the interview, claim 26 and the prior art were discussed. In addition, Applicants offered various claim amendments and presented arguments consistent with those set forth in these Amendments and Remarks, respectively. A formal agreement regarding the claims was not reached with the Examiner. Applicants agree with the Interview Summary mailed July 14, 2010.

Anticipation Rejection of Claims 26-29 and 31-49 over Zhang

Claims 26-29 and 31-49 have been rejected as allegedly unpatentable over Zhang.

Applicants have amended claim 26 to recite a biological assay device comprising an electrically conductive substrate, wherein the electrically conductive substrate is a microneedle or a microelectrode; and a layer of sol-gel deposited on at least one surface of the electrically conductive substrate. Zhang does not teach each and every element of claim 26 as amended. Therefore, Applicants respectfully request the withdrawal of this rejection.

In addition, whereas claims 29, 31, 32, 34, 36, 38, 40, 42 and 44-46 depend directly or indirectly from claim 26, Applicants respectfully request withdrawal of the rejection of these claims as well.

Regarding claim 27, Applicants respectfully assert that Zhang does not anticipate claim 27 because Zhang does not teach or disclose each and every element of the claim. Specifically, Zhang does not teach or disclose a microneedle or a microelectrode, as required by the claim. The Office Action defines the term “microelectrode” to mean an electrode having an “ability to detect microscopic levels of a substance.” Office Action, mailed March 25, 2010, page 3. Applicants respectfully assert that a person of ordinary skill in the art defines the term “microelectrode” very differently. A person of ordinary skill in the art understands that the “micro” prefix of the term “microelectrode” refers to the microelectrode’s small physical dimensions, not its ability to detect “microscopic” levels of a substance. Therefore, the Office Action’s definition of “microelectrode” is inconsistent with the understanding of a person of ordinary skill in the art. Further, the Office Action provides no support for the Office Action’s idiosyncratic definition of “microelectrode.” Applicants thus respectfully request withdrawal of this rejection.

In addition, whereas claims 28, 33, 35, 37, 39, 41, 43 and 47-49 depend directly or indirectly from claim 27, Applicants respectfully request withdrawal of the rejection of these claims as well.

New Claims 50-55

In accordance with the Examiner’s suggestions, Applicants have added new claims 50-55. Applicants respectfully assert that claims 50-55 are patentable.

CONCLUSION

An allowance of the claims is respectfully solicited. The Examiner is respectfully invited to contact the undersigned attorney at 404.745.2470 or J. Clinton Wimbish at 704.338.5021 to discuss any matter related to the present application. This response is filed together with a petition for a one month extension of time and the required fee. No additional fees are believed due; however the Commissioner is hereby authorized to charge any additional fees that may be required or to credit any overpayment to Deposit Account number 11-0855.

Respectfully submitted,

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Date

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